



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,669	07/02/2003	James P. Mulhern	6993-43 C11 (182684)	7265
23973	7590	07/22/2005	EXAMINER	
DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			CAMPBELL, KELLY E	
		ART UNIT		PAPER NUMBER
		3618		
DATE MAILED: 07/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/613,669	MULHERN ET AL.
	Examiner	Art Unit
	Kelly E. Campbell	3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-30 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-5, 7-14 and 16-30 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 05/04/2005

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,9,11-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Furukawa (US 6,153,222).

Furukawa teaches a power wheelchair comprising:  
a frame (12) ;

a pair of drive wheels (31);

each wheel having an axis of rotation;

motors (33) for driving respective drive wheels;

a pair of suspension or rocker arms (40), independently attached, one on each side of the frame, each arm pivoted to the frame about a suspension axis rearward of the axes of rotation of the drive wheels, see Figure 1,

each of the drive wheels and its associated motor (33) being mounted on a respective one of the suspension arms via support (32);

at least one ground-engaging idler wheel (18) connected to said frame in front of said drive wheel (31);

and a first and second anti-tip wheel (44), for up-and-down motion, mounted to the wheelchair so as to be in contact with the ground in a normal resting state of the

wheelchair and connected to one of the drive wheels (31), wherein pivoted to the frame about a suspension axis forward of its center;

the connection between the anti-tip wheel and the drive wheel permitting the axis of rotation of said anti-tip wheel to move relative to said frame in response to and in an opposite direction from movement of the axis of rotation of said one drive wheel relative to said frame;

including a resilient suspension, see springs (26), between each said suspension arm and said frame;

wherein the frame supports a seat;

and such that reverse acceleration of the wheelchair urges upward movement of the anti-tip idler wheel.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 6,153,222).

With regards to claim 10, the wherein the distance between said anti-tip wheels and the ground is adjustable, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an adjustable tip-wheel, since it

has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

Claims 8,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 6,153,222) as applied to claim 1 above, and further in view of Schaeffner et al (US 6,129,165).

Furukawa (US 6,153,222) teaches all aspects of the claimed invention as discussed above for claim 1 above, except the frame including an upper shell.

Schaeffner et al teaches a wheelchair frame having an upper covering shell (34), see Figure 5 and Column 18, lines 64-67.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wheelchair frame of the invention taught Furukawa (US 6,153,222) to include an upper shell as taught by Schaeffner et al, in order to provide protection for the vehicle motor, battery and transmission components, since a protective covering for vehicle components is well known in the art.

Claim 17-24,26-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 6,153,222) as applied to claim 1 above, and further in view of Finch et al (US 5,772,237).

Furukawa teaches all aspects of the claimed invention as discussed above for claim 1, except a spring acting in compression between the frame and the drive wheels.

Art Unit: 3618

Finch et al teaches a power wheelchair comprising: a frame; a pair of ground-contacting drive wheels disposed on opposite sides of the frame; a pair of motors a pair of springs (13), each acting in compression between the frame and a respective one of the suspension arms so as to urge the drive wheel downward relative to the frame and Finch also teaches a crossbar (8) that extends across the frame, the crossbar being pivotally mounted to the frame about a central fore-and-aft axis, the crossbar carrying wheels 4 at each end.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wheelchair having a drive wheel, to include a spring acting in compression in between the frame and the drive wheel, for providing an improvement in shock absorption for a smoother ride and preserving the chair quality over time. It would have been further obvious to provide a crossbar connecting idler wheels across the frame of the chair for a more unified maneuvering system and ease of steering the wheelchair.

Claims 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa (US 6,153,222) and Finch et al (US 5,772,237) as applied to claim 17 above, and further in view of Schaeffner et al (US 6,129,165).

Furukawa (US 6,153,222) modified by Finch et al (US 5,772,237) teaches all aspects of the claimed invention as discussed above for claim 17 above, except the frame including an upper shell.

Schaeffner et al teaches a wheelchair frame having an upper covering shell (34), see Figure 5 and Column 18, lines 64-67.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wheelchair frame of the invention taught Furukawa (US 6,153,222) modified by Finch et al (US 5,772,237) to include an upper shell as taught by Schaeffner et al, in order to provide protection for the vehicle motor, battery and transmission components, since a protective covering for vehicle components is well known in the art.

### ***Allowable Subject Matter***

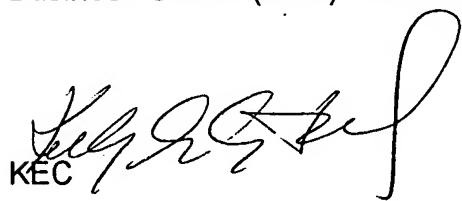
Claims 6 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly E. Campbell whose telephone number is (571) 272-6693. The examiner can normally be reached on 9:00-5:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
KEC

  
7-11-5  
BRYAN FISCHMANN  
PRIMARY EXAMINER